Web table B Critical appraisal tool for quantitative studies (adapted from the Hamilton tool)[1]

A. Study Design/Allocation Bias		**Critical appraisal criterion number**
A1. Study Design:	Randomised Controlled Trial Cluster Randomised Controlled Trial Prospective Controlled Study Prospective Uncontrolled Study Repeat cross sectional study (interrupted time series or routine surveillance data) Cross sectional study Case Control study Case reports Qualitative study Economic model (computable equilibrium analysis) Economic model (input output model) Other	
A2. Study design characteristics:	A= Includes concurrent comparison groups; B= No concurrent comparison groups	1
B. Selection bias		
B1. Study selection:	A= Selected study sample very likely to represent population from target area AND ≥60% response rate and follow-up; B= Not representative of target population OR response rate or follow-up ≤60% *[Routine data: Unless it is stated that individual data were taken from routine data specifically for the study population then studies using routine data labeled* B]	2
C. Confounders		
C1. Were there important differences between groups prior to the intervention?	A=Comparison groups are matched for key confounders or there is appropriate control for key confounders in the analysis B= Does not meet above criteria	3
C2. Are the statistical methods appropriate for the study design?	A=Yes B=No or not clear	4
C3. Was there an adequate attempt to control for secular trends:	A=Yes B=No or not clear	5

C4. Was there an adequate number of data points?	A=At least two data points before and two data points after the intervention B=Less than two data points before and two data points after the intervention or not clear	6
C5. Was there an attempt to control for regression to the mean?	A=Yes, the outcome of interest was either not an outlier at the beginning of the series or the analysis has taken its outlier status into account B=No or not clear	7
D. Data Collection		
D1. Summary of data collection:	A= Clear description of an established data collection method AND an objective validated outcome measure used (eg SF-36) OR routine national agency data B= Unclear or inappropriate description of data collection method OR non-validated outcome measure	8
E. Withdrawals & Dropouts		
E1. Initial sample size?	Number	
E2. Method of sampling:	Method	
E3. Baseline response?	Number and % of initial sample	
E4. Withdrawals/drop outs	Numbers and reasons per group	
E5. Are there differences between participants and dropouts?	Describe briefly	
E6. Final response rate:	Number and % of baseline response rate	
E7. Length of follow up:	Number of follow ups and length	
E8. Summary of withdrawals and follow-ups:	A= 80-100% of original sample in final sample; B = Less than 80%/not reported/retrospective study/can't tell (if using routine data which is not linked to individuals or not panel data at end point then B)	9

1. Effective Public Health Practice Project. *Quality assessment tool for quantitative studies*. Effective Public Health Practice Project, 1998. http://nccmt.ca/uploads/registry/QATool.pdf.